Special Issue

Biopolymers and Natural Scaffolds

Message from the Guest Editor

Nature provides a variety of inspiring biopolymers, which are produced by animals, plants and bacteria: collagen from different vertebrates and even invertebrates, chitosan from crabs, silk fibroin from silkworms and spiders, alginate and agarose from algae, gellan gum produced by bacteria, cellulose from wood, and pectins from fruits can be the basis of natural scaffolds, coatings and bioinks. Consequently, myriads of natural biopolymer-based biomaterials have been developed, including hydrogels, porous sponge-like materials, fibers, textile structures, membranes, and additively manufactured structures. Biopolymer-based scaffolds are applied as tissue grafts, for the administration of cells for tissue engineering applications as well as for the establishment of in vitro cell models to better understand healing and regeneration. In this Special Issue of *Polymers*, we will collect papers covering the most recent research in the field of biopolymer scaffolds, including preparation and characterization, the in vitro testing of cell responses and cell differentiation, the building of hierarchical structured scaffolds, in vitro cell models and in vivo studies.

Guest Editor

Dr. Anne Bernhardt

Centre for Translational Bone, Joint and Soft Tissue Research, Medical Faculty and University Hospital "Carl Gustav Carus", 01307 Dresden, Germany

Deadline for manuscript submissions

closed (31 March 2022)

Polymers

an Open Access Journal by MDPI

Impact Factor 5.8
CiteScore 11.0
Indexed in PubMed

mdpi.com/si/79100

Polymers
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
polymers@mdpi.com

mdpi.com/journal/polymers

Polymers

an Open Access Journal by MDPI

Impact Factor 5.8
CiteScore 11.0
Indexed in PubMed

mdpi.com/journal/polymers

About the Journal

Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.9.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Alexander Böker
Fraunhofer-Institut für Angewandte Polymerforschung, Lehrstuhl für Polymermaterialien und Polymertechnologie, Universität Potsdam, Geiselbergstraße 69, 14476 Potsdam-Golm, Germany

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubMed, PMC, FSTA, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (Polymers and Plastics)